



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,259	12/01/2003	Michael Stuart Laurie	PLANIT-1	1636
7590		06/16/2006	EXAMINER	
Michael S. Laurie		JANAKIRAMAN, NITHYA		
1059 Mesa Crescent				
Mississauga, ON L5H 4B5		ART UNIT		
CANADA		PAPER NUMBER		
		2191		

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/724,259

Applicant(s)

LAURIE, MICHAEL STUART

Examiner

Nithya Janakiraman

Art Unit

2191

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/01/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 1-20 are presented for examination. This office action is in response to the application filed December 1, 2003, claiming priority from Provisional Application received December 3, 2002.

Priority

2. The later-filed application must be an application for a patent for an invention that is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

3. The disclosure of the prior-filed application, Application No. 60/430584, fails to provide adequate support or enablement in the manner provided by the first paragraph of 35 U.S.C. 112 for one or more claims of this application. Claims 1, 6-7, and 10-14 make reference to a memory, which is not disclosed in the original nonprovisional application. Therefore, these claims will not benefit from the priority date.

Claim Objections

4. Claim 18 is objected to because of the following informalities: applicant first refers to an "object", and then later refers to a "wall". Proper consistency is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claims 19 and 20 reference themselves, and thus fail to specify the exact claim from which they depend. Appropriate correction is required.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claim 15-17 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

10. Regarding independent claim 15, there is no tangible, concrete and useful result. Transmitting data to a computer is not sufficient to be statutory subject matter. All depending claims are rejected as well.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kozah et al., US Patent No. 5,337,149 (hereinafter Kozah).

13. For claim 1, Kozah discloses:

An apparatus for establishing a two-dimensional layout of a physical structure, comprising:

a mechanism for forming a first linear representation of the layout of the exterior of the structure, the forming mechanism connected to an input device that generates the first representation (CAD software, disclosed by Kozah, is inherently capable of this action);

a distance measuring device for scanning under the direction of an operator the exterior walls of the structure, starting at a first corner and scanning to a second distal corner, sequentially measuring the lengths of each exterior wall until all structure walls have been measured (see col. 2, lines 16-18);

an angle measuring device for scanning under the direction of the operator the exterior walls of the structure, starting at the second corner and sequentially measuring the

relative angles between adjacent walls until all relative angles between structure walls have been measured (see col. 2, lines 16-18);

data transfer devices to transmit the distance and angle measurements (see col.2, lines 18-19); and

a memory which receives and stores the distance and angle data (see col.2, lines 19-21).

14. For claim 2, Kozah teaches:

The apparatus as described in claim 1 wherein the distance measuring device is a portable laser rangefinder (see col. 3, lines 21-24).

15. For claim 3, Kozah teaches:

The apparatus as described in claim 1 wherein the distance measuring device is a portable sonar type rangefinder (see col. 3, lines 21-24).

16. For claim 4, Kozah teaches:

The apparatus as described in claim 1 wherein the angle measuring device is a gyroscope (see col. 2, lines 67-68, "measuring device").

17. For claim 5, Kozah discloses:

The apparatus as described in claim 1 wherein the angle measuring device is a theodolite (see col. 2, line 5).

18. For claim 6, Kozah teaches:

The apparatus as described in claim 1 wherein the forming mechanism includes a computer and associated software connected to the memory (see col. 1, lines 10-19; col. 5, lines 9-20).

19. For claim 7, Kozah teaches:

The apparatus as described in claim 1 wherein the memory transmits the data to a remote computer that communicates with the forming mechanism (see col. 5, lines 34-37).

For claim 8, Kozah teaches:

The apparatus as described in claim 6 wherein the input device is connected to the computer and is manually directed by the operator, and the input device is at least one of a stylus, mouse or keyboard (see col. 3, lines 8-13).

For claim 9, Kozah teaches:

The apparatus as described in claim 6 wherein the input device is capable of receiving a pre-existing digitized blueprint and transmitting the blueprint to the computer (Kozah discloses CAD, which is inherently capable of receiving and transmitting; see col. 5, lines 1-3, "data transmission").

For claim 10, Kozah teaches:

The apparatus as described in claim 6 wherein the computer and associated software adjust the scale of the line segments of the first linear representation based on the distance measurements stored in memory (see col. 8, lines 11-16).

For claim 11, Kozah teaches:

The apparatus as described in claim 10 wherein the computer and associated software adjust the relative angles between the line segments of the first linear representation based on the angle measurements stored in memory (see col. 8, lines 11-16).

20. For claim 12, Kozah teaches:

An apparatus for establishing, on-site, a two dimensional floor plan for a physical structure, comprising:

a portable computer capable of running software (see col. 1, lines 10-19; col. 5, lines 9-20);

at least one input device to manually sketch initial first dimensions of objects within a physical structure onto a display screen of the computer (CAD software, disclosed by Kozah, is inherently capable of this action; see also col. 3, lines 8-11; col. 10, lines 39-40);

a portable device for measuring distances between objects within a structure (see rejection of claims 2, 3);

a portable device for measuring relative angles between objects within a structure (see rejection of claim 4, 5);

means to transmit linear and angular measurements to the computer (see rejection of claim 7);

a memory which receives and stores the distance and angle data (see col. 2, lines 16-21);

and

customized CAD software running on the computer that is configured to calculate an appropriate display scale to show on the screen, and to adjust the first linear

representations so that they conform to the calculated display scale, and to adjust the

relative angles between objects based on the measurements received from the portable

measuring devices (see col. 8, lines 11-16).

21. For claim 13, Kozah teaches:

The apparatus as described in claim 12 wherein the memory includes a mechanism for displaying a menu having symbols of features, including a door and a window on the screen, said symbols able to be chosen from the menu and placed in the line segments on the screen of the first room data, said displaying mechanism connected to the computer (see col. 7, lines 55-59).

22. For claim 14, Kozah teaches:

The apparatus as described in claim 13 wherein the memory includes a mechanism for editing the line segments of the room data, said editing mechanism connected to the computer (CAD software, disclosed by Kozah, is inherently capable of this action).

23. For claim 15, Kozah teaches:

A method for establishing a two-dimensional exterior layout of a physical structure, comprising:

forming a first representation of the layout with a computer and input device (CAD software, disclosed by Kozah, is inherently capable of this action);

displaying the first representation of the layout on a screen (CAD software, disclosed by Kozah, is inherently capable of this action);

placing a portable scanning device adjacent to an exterior corner of the structure (Kozah discloses measuring from a portable device, thus capable of scanning from any point);

scanning the distances and relative angles between all adjacent exterior walls(Kozah

discloses measuring from a portable device, thus capable of scanning from any point);

and transmitting the distances and relative angles to the computer so that it can adjust the lengths and angles of the initial linear representations to match an appropriate display scale (see col. 8, lines 11-16).

24. For claim 16, Kozah teaches:

The method as described in claim 15 wherein the input device is capable of receiving a pre-existing digitized blueprint and transmitting the blueprint to the computer (CAD software, disclosed by Kozah, is inherently capable of this action).

25. For claim 17, Kozah teaches:

The method as described in claim 15 wherein the input device is connected to the computer and is manually directed by the operator, and the input device is at least one of a stylus, mouse or keyboard (see rejection of claim 8).

26. For claim 18, Kozah teaches:

A method for generating a digital, two-dimensional floor plan for a physical structure, comprising the steps of:

creating a first linear representation of a first object of the structure on the display screen of a portable computer running CAD software using at least one input device (CAD software, disclosed by Kozah, is inherently capable of this action);

pointing a device that measures the distance from the starting corner position of the first object to the ending corner position (see col. 3, lines 25-40);

transmitting the distance data to the computer (see col. 3, lines 50-55);

calculating the ratio between the first linear object representation and the measured linear dimension of the object (see rejection of claims 10 and 11);

displaying the adjusted wall length on a display screen (see col. 8, lines 27-29);

drawing a linear representation of a second object that is adjacent the first object (CAD software, disclosed by Kozah, is inherently capable of this action);

pointing the distance measuring device from the ending corner position of the first object, to the far corner position of the second object to measure a new distance (see col. 3, lines 25-40);

pointing a device that measures the relative angle between the second object and the first object (see col. 3, lines 25-40);

transmitting the second distance and angle to the computer, so that the length of the second linear representation can be adjusted to match an appropriate display scale, and the relative angles between the objects can be adjusted to match the measured relative angles (see col. 3, lines 50-55);

displaying a revised representation of the adjusted wall on the display screen (see col. 8, lines 27-29); and

repeating the previous four steps until the relative lengths and angles of every exterior object of the structure are calculated and displayed onto the screen (see Fig. 7).

Claim Rejections - 35 USC § 103

27. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

28. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kozah, and further in view of the elementary mathematical method of triangulation. With respect to claim 19, Kozah discloses a method for using a portable device for directly measuring distances and angles of any three-dimensional object to create a complete model of the object (see Abstract). However, Kozah does not explicitly disclose using the elementary trigonometric method of triangulation to calculate dimensions. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to use this well-known technique to assist in the task of surveying, motivated by the desire to save time and energy for the user by requiring fewer measurements to be taken.

29. For claim 19, Kozah teaches:

The method as described in claim 19 including after the first exterior scanning step, there are the steps of:

removing the distance and angle measuring devices from the exterior of the building;

placing the distance and angle measuring devices at or near a corner of a first interior room, the first room located in a corner of the building (see Fig. 7);
directly measuring the dimensions of the two nearest walls, and the relative angles between them, using the distance and angle measuring devices (see Fig. 7);
measuring the distance and angle from the first initial corner to the distal corner that is furthest away from the initial corner (See Fig. 7);
transmitting the distance and angle data to the computer (see col. 3, lines 50-55);
calculating the dimensions of the two furthest walls by a triangulation technique (triangulation is a well-known method of calculating distances and dimensions);
scaling of data to conform to the previously determined scale (see col. 8, lines 11-16);
and displaying a revised representation of the adjusted interior walls on the display screen (see col. 8, lines 27-29).

30. For claim 20, Kozah teaches:

The method as described in claim 20 including after the first interior scanning step, there are the steps of:

removing the distance and angle measuring devices from the first interior room of the building (see Fig. 7);

placing the distance and angle measuring devices at or near a corner of a second interior room, the second room adjacent the first room (see Fig. 7);

directly measuring the dimensions of the two nearest walls, and the relative angles between them, using the distance and angle measuring devices (see Fig. 7);

measuring the distance and angle from the initial corner to the distal corner that is furthest away from the initial corner (see Fig. 7);
transmitting the distance and angle data to the computer (see col. 3, lines 50-55);
calculating the dimensions of the two furthest walls by a triangulation technique (triangulation is a well-known method of calculating distances and dimensions);
scaling of data to conform to the previously determined scale (see col. 8, lines 11-16);
and
displaying a revised representation of the adjusted interior walls on the display screen (see col. 8, lines 27-29).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nithya Janakiraman whose telephone number is 571-270-1003. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bruce can be reached on 1234234. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 2191

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NJ

A handwritten signature in black ink, appearing to read "David Bruce", written in a cursive style.

**DAVID V. BRUCE
PRIMARY EXAMINER**